IN THE SPECIFICATION:

Please amend the specification as follows:

[4] FIG. 1 is a schematic diagram showing general functional components of a data switching node100. The data switching node100 is a multi-ported device having a shared memory102 design and forwarding Protocol Data Units (PDUs) between N physical ports104 in accordance with supported data transfer protocols. Although pictured as such, the invention is not limited to data switching equipment having a shared memory design.

[10] Managing the operation of the data switching node 100 and managing resources at the data switching node 100 is essential for efficient data switching performed by a switching processor 120. In forwarding PDUs, the switching processor 120 makes use of a PDU classifier 122 to inspect PDUs pending processing and to ~~inspects~~ inspect a body of routing information provided by an associated destination address resolution function 124 to determine output ports 104. The PDU classifier122 also makes a determination whether PDUs are unicast or a multicast.

[16] ~~Implementations~~ Manufacturers of data switching equipment ~~is~~ have been under a high market pressure to reduce component count which led to embedded designs. Learning protocols used by the data switching nodes are typically embedded and form an integral part of the firmware/software executed during the operation of the data switching node.

[17] FIG. 2 is a schematic diagram showing an exemplary implementation of a data switching node ~~providing~~ affecting resource management and delivering data services.

[35] The features and advantages of the invention will become more apparent from the following detailed description of the preferred embodiment(s) with reference to the attached diagrams wherein:

FIG. 1 is a schematic diagram showing a general functional architecture of a data switching node;

FIG. 2 is a schematic diagram showing an exemplary prior art implementation of a data switching node ~~providing~~ affecting resource management and delivering data services;

FIG. 3 is a schematic diagram showing an exemplary implementation of a data switching node providing resource management and delivering data services in accordance with an exemplary implementation of the invention;

FIG. 4 is a schematic diagram showing exemplary internal components of a data switching node and, associated requests and responses implementing an information exchange protocol in accordance with an exemplary implementation of the invention;

FIG. 5 is another schematic diagram showing exemplary internal components of a data switching node and, associated requests and responses implementing an information exchange protocol in accordance with an exemplary implementation of the invention;

FIG. 6 is yet another schematic diagram showing exemplary internal components of a data switching node and, associated interrupt requests implementing an information exchange protocol in accordance with an exemplary implementation of the invention; ; and

FIG. 7, FIG. 8, FIG. 9, FIG. 10 and FIG. 11 are a schematic diagrams showing data frame formats for data frames exchanged with the management processor in implementing an information exchange protocol in accordance with an exemplary implementation of the invention.

[51] The above mentioned service delivery components in performing their respective functionality issue requests 530 for the management processor including: a learn MAC address request, a delete MAC address request, a delete multicast address request, a new VLAN port request (announcement), an age VLAN port request (announcement), etc. (Aging features are

typically used in minimizing memory storage requirements at the data switching node by deleting stale information not ~~use~~ used for a relatively long period of time.)

[54] In support of the port monitoring function 140 and the statistics gathering function 132, the management processor 600 is informed of detected critical events via encapsulated interrupt requests 610. An interrupt request on physical link state change is issued by physical ports 104 to inform the management processor 600 whether the link is functional. An interrupt request on statistic counter roll-over is sent to the management processor 600 ~~each~~ if the value of a cumulative statistic counter exceeds a maximum expressible value of a register holding the value of the cumulative statistic counter. (Concurrent with the issuance of the statistic counter roll-over interrupt request the value of the register associated with the statistic counter is reset to a predetermined value – typically 0.)

[56] As mentioned above an 8 byte header is used in conveying data frames. The header includes data fields specifying: a data frame type identifier, a data frame sequence number, a memory address for read and writes, etc. The invention is not limited to the above data fields; other fields may be used in implementing different features and functionality. At least the data frame type identifier data field is mandatory. Data fields in the header have a specific location with respect to the start of the data frame. In the example shown the data frame type identifier is specified in the fist data field and specifically the first 4 bits of the first byte (top right corner). At a minimum, the data frame type identifiers have to be unique for data frames sent via the data exchange medium 320 in a single direction; that is, data frame type identifiers may be reused for data frame transfers in the opposite direction.